TERMS OF REFERENCE

Consultancy services for an adaptive learning technology platform

Supporting an Education Reform Agenda for improving Teaching, Assessment and Career Pathways (SERATAC)

I. Overview

The Palestinian Ministry of Education and Higher Education (MoEHE) is dedicated to enhancing the achievements and skills of students, with a focus on meeting basic education goals despite facing various obstacles such as the catastrophic impact of the conflict on the Gaza Strip and West Bank, the challenges posed by the COVID 19 pandemic, and teacher strikes. The current context has necessitated an intensified focus on the agility and resilience of the education system, with priority on supporting teachers and students in overcoming these challenges.

In the West Bank, education has been alternating between blended learning and online learning since October 2023. In Academic Year (AY) 2023-24, students participated in online instruction for two out of five days per week. In AY 2024-25, in-person schooling returned to four days, with one day remaining online. In the context of reduced opportunities for learning in-person and the need for intensive learning recovery, the MoEHE is searching to engage a firm to implement an adaptive learning solution to support tailored mathematics learning for public school students in the upper primary and lower secondary grades.

II. Objective of the Consultancy

The objective of the consultancy is to implement an adaptive learning platform for public school students in the West Bank that personalizes mathematics learning to the individual needs of students, in alignment with the MoEHE's learning objectives.

III. Scope of Work

A firm is being contracted to implement an artificial intelligence-based adaptive learning platform suitable for use by students Grades 5 through 9 in the West Bank. This Terms of Reference (TOR) includes the acquisition, customization, deployment, training support, and implementation support of this platform.

Under this contract, the firm is expected to deliver:

- A fit-for-purpose adaptive learning platform that is deployed for students and teachers in public schools in the West Bank.
- Training for administrators, teachers, and students on how to use and troubleshoot the platform.
- Technical troubleshooting and fixes as needed during the implementation period to ensure a functional and accessible platform for users.
- Key reports at predefined intervals that provide analysis of student performance and user engagement data.

While the MoEHE ultimately aims to ultimately deploy the platform across grades 5 through 9 in the West Bank, the activities covered under this TOR may focus on a subset of grades, schools, or geographic

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areas. Hence firms are encouraged to apply if their adaptive learning solution currently covers or can be tailored to cover content **suitable for a subset** of these grades.

Similarly, firms are invited to submit an expression of interest if they **either**: a) have an existing solution readily available that currently satisfies all listed functional requirements below **or** b) have an existing solution that can be tailored to satisfy the functional requirements below and will be ready for piloting by January 2026.

Subject to performance, suitability, and mutual agreement, the consultancy may be extended or amended to support further customization of the platform and scale-up.

Functional requirements

The MoEHE has identified several key functional requirements of the adaptive learning platform. The contracted firm is required to implement a platform that has the following characteristics:

1. Accessible and Independent use

- The platform is optimized for use on mobile devices, and with additional compatibility for use on desktop and laptop.
- Users are able to connect remotely through internet connection/mobile data to the platform from both school and home.
- The platform is accessible in low-bandwidth environments or should have a low-bandwidth option for use with low internet connectivity.
- The platform is standalone and does not require access to physical or online resources/curriculum materials.
- Students are able to engage independently with the platform and learn with limited need for guided instruction from family members or teachers.
- The platform incorporates security features to mitigate risks of misuse, and provides userfriendly protocols for parents and educators to support student's safe and responsible application and device use.
- The platform is available for use in standard Arabic and uses the Hindu-Arabic numeral system.

2. Interactive and Adaptive Learning

- The platform provides mathematics exercises and assessments that adjust dynamically to the students' learning.
- The platform offers math content across multiple grade levels to enable placement based on student proficiency, accommodating those performing significantly above or below grade level.
- The platform's interactivity is driven by artificial intelligence and machine learning; not delivered through a traditional video plus exercises combination.
- The platform provides both pedagogical and motivational feedback to support student engagement and progress.

3. Complementary to Instruction

- The platform enhances, and allows extension of, teacher-led instruction; but is not intended to not replace teacher-led instruction.
- The platform supports personalized viewing "modes" that allow for the aggregation of data at different levels, including teacher mode (classroom level), principal mode (school

- level), district administrator mode (district level/supervisors), and MoEHE mode (highest level of aggregation).
- The platform offers low-level of customization/editability by the teacher, administrator, or MoEHE. This could include for example the ability to open additional levels of depth/complexity, or customization to specific themes (ie. Students accessing Algebra content only).
- All content, training materials, and resources developed under the contract and offered through the platform are fully aligned with the UNESCO Recommendation on Education for Human Rights, International Understanding, Cooperation, Fundamental Freedoms, Global Citizenship and Sustainable Development dated November 20, 2023.

4. Diagnostic and Data-Generating

- The platform includes diagnostic assessments to evaluate student knowledge and skills compared to grade-level curriculum expectations.
- The platform analyzes collected data and provide key metrics and performance reports on student engagement and learning.
- Analyzed data is available in a format that is accessible and understandable to a teacher, principal, administrator, or MoEHE (e.g., through a dashboard). Data can be individualized as well as aggregated (e.g., by class or grade or mathematics subcategory).
- The platform takes into consideration key interoperability requirements for eventual linkage to MoEHE systems (while this linkage is not part of this TOR, the platform should be configured to have the possibility of eventual linkage to the Ministry's Education/Learning Management Information Systems).

Security standards

The software should be licensed for institution-specific use. As it is a web application, it must consider the following security standards:

- Verification for handling malicious data input
- Verification for cryptography in storage
- Verification of data protection
- Verification of communications security
- Verification of configuration requirements
- Verification of business logic
- Verification for malicious controls
- Verification of HTTP security configuration
- Verification of REST & SOAP web services

Supporting activities

In addition to the delivery of the adaptive learning platform, the contracted firm shall be responsible for the following supporting activities that will be required to ensure proper usage of the platform by students, teachers, administrators, and the MoEHE.

1. Student Registration on the Platform

The firm shall be responsible for registering the program's beneficiary students on the platform according to the schedule and names provided by the MoEHE.

2. Awareness Sessions with Teachers, Administrators, and MoEHE

Teachers, administrators, and MoEHE shall receive an orientation and training on the use of the platform. This training shall include: basic technical troubleshooting, pedagogical application (e.g., when and how to encourage the use of the platform among by their students, especially at home), and data analysis and interpretation (e.g., how to access data and generate dashboards to monitor student data, and basic training on how to use this data to support instruction). The trainings may differ for the teachers, administrators, and MoEHE staff.

Students and families shall receive either a basic orientation or be provided with materials such as a brochure, short video, infographic, etc., explaining the use of the platform and with basic troubleshooting guidance.

3. Monitoring and follow up

The firm shall monitor both teacher and student platform use. It will develop a live and up-to-date dashboard with key student learning proficiency and engagement metrics, as well as teacher engagement metrics, available in an easy-to-view dashboard module to the MoEHE and other relevant administrators (exact metrics to be decided upon with the MoEHE). The firm shall produce a weekly report of key dashboard metrics for sharing with the MoEHE.

IV. Deliverables and timetable

See Table 1 below for a summary of the expected deliverables and tentative delivery dates.

Table 1: Summary of deliverables

| Deliverable | | Description | Delivery date |
|-------------|---|---|-------------------------|
| 1. | Mapping of content and skills offered through platform | Document showing the content and skills covered by the platform and its alignment to MoEHE learning standards, including gaps/areas requiring further development | October 2025 |
| 2. | Mapping of key assessment items offered through platform | Document showing key assessment items/diagnostic test content covered by platform and its alignment to MoEHE learning standards, including gaps/areas requiring further development | October 2025 |
| 3. | Rollout plan | Detailed plan for platform rollout, including key dates, deliverables, testing plans, monitoring/troubleshooting mechanisms, and others. | October 2025 |
| 4. | Dummy platform for testing | Modified/adapted platform ready for review, with inclusion of additional content, skills, and assessment needs as identified through deliverable #1 and #2 | November 2025 |
| 5. | Training and take-home materials for principals, teachers, families, and students | Materials (training materials, take-home resources, etc.) developed for principals, teachers, families, and students on how to use platform, including key troubleshooting and safeguard guidance | December 2025 |
| 6. | Testing of platform and materials | Testing of platform and training/take-home materials in selected schools to gather feedback and make modifications as needed | January – April 2026 |

| 7. Ongoing, weekly report on key engagement and learning metrics 8. Test report | Weekly report of key engagement and learning metrics, drawn from live dashboard data, for sharing with the MoEHE. Report of key engagement and learning metrics during testing period, including troubleshooting/technical support issues, necessary live platform fixes, and proposed | Weekly from January to April 2026 May 2026 |
|--|---|---|
| 9. Platform revisions | changes for rollout. Revisions made to the platform, content, and/or training/take-home materials | May – August 2026 |
| 10. Rollout | Rollout of updated platform, implementation of training/orientation for teachers/principals/district-level administrators, distribution of take-home materials for students and families, enrolment /registration of users onto platform, and begin operation of a functional technical support desk. | September 2026 – May 2027 |
| 11. Ongoing, weekly report on key engagement and learning metrics | Weekly report of key engagement and learning metrics, drawn from live dashboard data, for sharing with the MoEHE. | Weekly from September 2026 to May 2027 |
| 12. Midterm report | Midterm report of key engagement and learning metrics from first half of rollout period, including troubleshooting/technical support issues, necessary live platform fixes, and other key information. | January 2027 |
| 13. Final report | Final report on engagement and learning on platform over entire contract period, including lessons learned, costs, considerations for sustainability and further roll-out. | June 2027 |

V. Minimum Required Qualifications

- Reputable Adaptive Learning platform with existing Math content, operating for at least 12 months required
- Evidence or research that shows that the platform encourages student engagement and has a measurable impact on learning outcomes preferred.
- Experience in the region desired
- Available material in Arabic strongly desired
- Proven experience in conducting similar assignments with governments/Ministries of Education
- Team fluency in English and Arabic is required.
- The firm may be requested to present a live demo of the platform as part of the evaluation process.

VI. Estimated Time Frame

- 1. Comprehensive platform testing and efficacy trial among a selected group of students and schools will begin in January 2026 in Grade 7, with scale-up beginning in Academic Year 26/27 targeting at minimum 20,000 students.
- 2. The estimated period of this consultancy is 22 months between September 2025 and July 2027.

Subject to performance, suitability, and mutual agreement, the consultancy may be extended or amended to support further customization of the platform and further scale- up across the West Bank.

VII. Selection Method and Type of Contract

The firm will be selected in accordance with "the World Bank's Procurement Regulations for IPF Borrowers", dated November 2020. "The Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated October 15, 2006, and revised in January 2011 and as of July 1, 2016, , revised November 2017, and in August 2018, November 2020, and September 2023, March 2025 shall apply to the program.

The selection method is Consultant Qualification Selection (CQS).

The MoEHE's procurement committee may invite longlisted firms to demonstrate platform use and functionality in a live session that shall be used as an input for shortlisting.

This is a lump-sum contract. Payments will be made upon final approval of submitted deliverables.

IX. Institutional Arrangements

The consulting firm will work under the supervision and guidance of the Palestinian Ministry of Education, Ramallah. The focal point and chief administrative counterpart will be he Director of the Project Coordination Unit (PCU) and SERATAC component 2 technical coordinator.